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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR             | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|-----------------|-------------|----------------------------------|------------------------|------------------|
| 10/660,604      | 09/12/2003  | Anton Schick                     | 32860-000568/US        | 7869             |
| 30596           | 7590        | 07/26/2006                       | EXAMINER               |                  |
|                 |             | HARNESS, DICKEY & PIERCE, P.L.C. | ROSENBERGER, RICHARD A |                  |
|                 |             | P.O.BOX 8910<br>RESTON, VA 20195 | ART UNIT               | PAPER NUMBER     |
|                 |             |                                  | 2877                   |                  |

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|------------------------------|------------------------|---------------------|
|                              | 10/660,604             | SCHICK, ANTON       |
| Examiner                     | Art Unit               |                     |
| Richard A. Rosenberger       | 2877                   |                     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 5/8/2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,5-9,15,17,20,24-28,30 and 31 is/are rejected.

7)  Claim(s) 2-4,10-14,16,18-19,21-23 and 29 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/18/2005.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 30 is rejected under 35 U.S.C. 101 because the final step of merely "determining" would not appear to be sufficient to constitute a tangible result, since the outcome of the determining step is not being claimed in a disclosed practical application nor is its outcome being made available in such a manner that its usefulness in a disclosed practical application can be realized. See OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 20, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Buechler (US 3,788,741).

Buechler shows in figure 9 a sensor with a first and second optical outputs (35, 33) which emit first and second illumination beams, a beam splitter (30) positioned so that one of the beams is transmitted and one is reflected to merge the beams. There is an imaging optic (14) arranged so that the two merger illumination beams form real images at different distances from the imaging optic due to different distances of the optical outputs from the imaging optic. Two measuring beams are created by at least partial reflection of the illumination beams by the surface. There are two optical input means (33, 36) coinciding in location with the optical outputs, and two light detectors (40) to record the intensities of the two measuring beams. The reference discusses an evaluation unit that determines a distance between the sensor and the surface by a comparison of the outputs of the detectors; see claim 8, in particular the “difference signal” 22.

6. Claims 5-9, 15, 17, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buechler (US 3,788,741) in view of Murata (US 4,115,005).

See above for a discussion of the system of figure 9 of Buechler.

The system of figure 9 if Buechler shows a particular manner of implementing the basic functional measurement of the references with two measuring beams that focus at different distanced form the system, with two detectors to detect the reflected light form the object being measured. The references show other systems that use the same basic

optical system in other particular arrangements; see in particular figure 5 of Buechler and figure 3 of Murata. The system of figure 9 of Buechler is presented in that reference as one embodiment of the more general manner of making the measurement (“[I]n FIG. 9 is illustrated one form of the invention ...”; column 5, line 3). Those in the art, looking at the variations shown in the systems of the references, would have recognized that variations in the structure was possible and would be operable. As shown in figure 5 of Buechler, it is known that the light output and input means can be the ends of optical fibers (as in claims 6, 15, and 25) and as shown in Murata, the light input means can be small apertures in a diaphragm (as in claims 7, 17, and 26). In both cases, the light outputs and inputs would at least obviously be >at least approximately point-shaped” (as in claims 5 and 24).

Buechler, in figure 9, discusses using “different colored light filters 42 and 43 and detectors may be employed which work at the different wavelengths ...” (column 5, lines 29-31), which at least clearly suggests the claimed “monochrome light detectors” of claims 8 and 27.

The use of any light detectors which are capable of detecting the measuring light beams would have been obvious, including the cameras of claims 9 and 28. It is noted that there is no structure in these claims that add any functionality to the claimed use of cameras beyond the mere use of the cameras as the type of detectors used in the references.

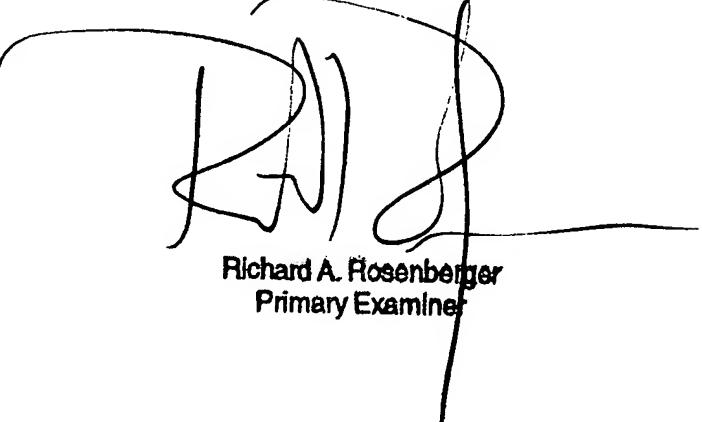
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7. As set forth on the previous office action, claims 2-4, 10-14, 16, 18, 19, 21-23, and 29 include patentable subject matter, but are objected to as being dependent upon unallowed parent claims. These claims would be allowable were they written in independent form including all of the limitations of their respective parent claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger  
21 July 2006



Richard A. Rosenberger  
Primary Examiner